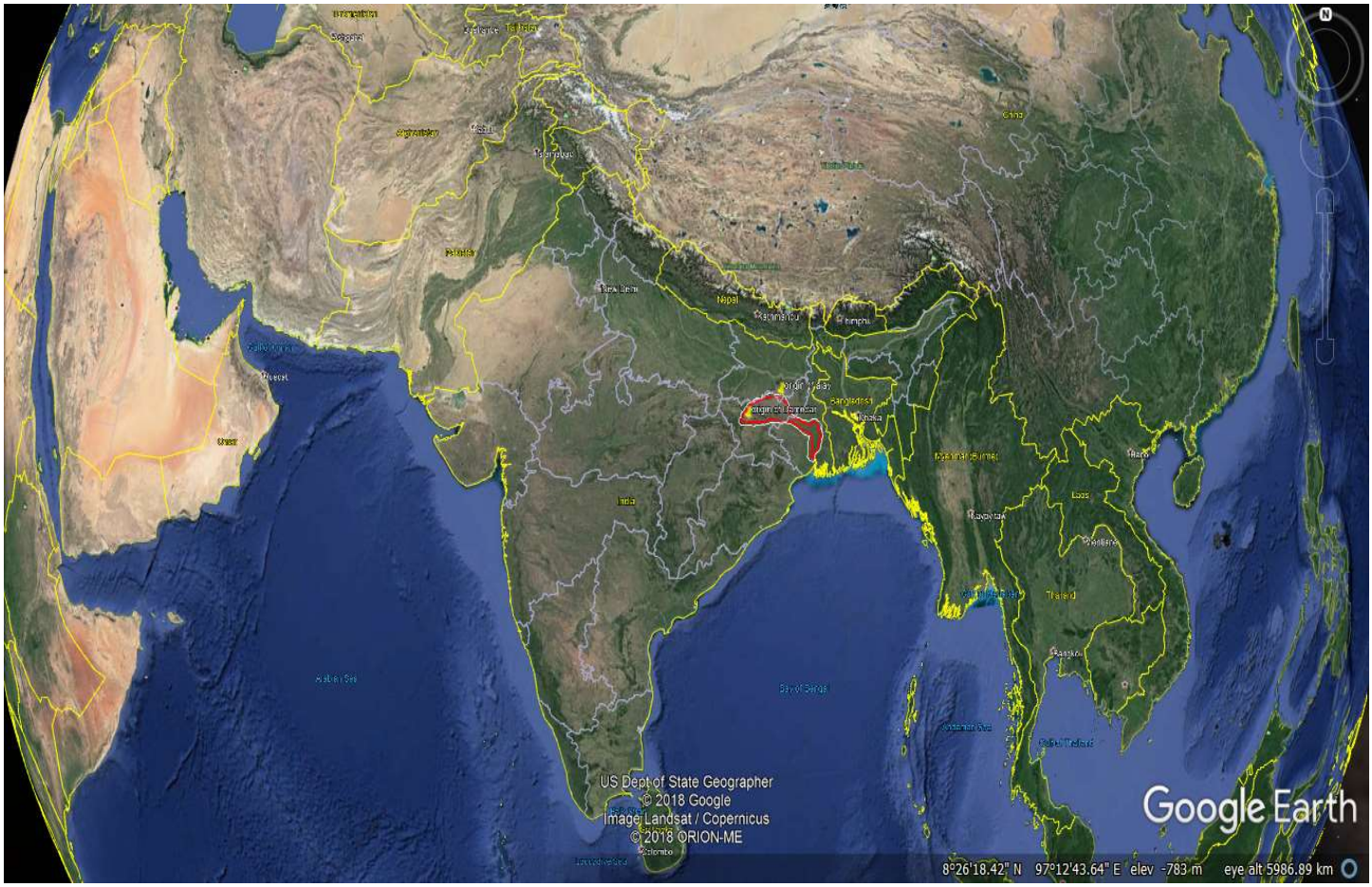
Research Proposal

Archaeology of the Ajay-Damodar Interfluve Region


US Dept of State Geographer
© 2018 Google
Image Landsat / Copernicus
© 2018 ORION-ME
Google Earth
8°26'18.42" N 97°12'43.64" E elev -783 m eye alt 5986.89 km

Research supervisor: **Dr. Suchira Roychoudhury**

Submitted by: **Siddhartha Saha**
Registration no.: VB-1218 of 2010-11
Registration date: 18-08-2017

Department of *A.I.H.C & Archaeology*.

VISVA-BHARATI UNIVERSITY,
SANTINIKETAN

Archaeology of the Ajay-Damodar Interfluve Region

Keywords: Ajay River, Damodar River, Barakar River, Kunur River, Interfluve, Chotanagpur Plateau, Prehistory, Chalcolithic, Early Historic, Medieval, Rockart, Jharkhand.

INTRODUCTION:

The present research attempts to investigate and interpret the archaeology of the Ajay-Damodar Interfluve Region. This area has been always as a potential area for early medieval settlement and sites specially centering around West Bengal. The landscape in this interfluvial zone can be categorized into different ecozones. It becomes imperative therefore to understand the human development in this area from the upstream to downstream through passage of time from prehistoric to medieval. The understanding of the development of early medieval times sites can only be done when the nature of archaeological record in the proceeding chronological period has been properly understood. This work propose to look beyond the framework of early medieval and have a holistic understanding over a wide chronological framework from prehistoric to medieval times.

AREA OF STUDY:

The study region is geomorphologically called to be an interfluve. An interfluve is a narrow, elongated and plateau-like or ridge-like landform between two valleys. More generally, defines an interfluve as an area of higher ground between two rivers in the same drainage system. These landforms are created by earth flow ("solifluction"). They can also be former River terraces that are subsequently bisected by fluvial erosion. In cases where there is a deposit of younger sedimentary beds (loess, colluvium) the interfluves have a rounder and less rugged appearance. A consequence of interfluve formation is the so-called "interfluvial landscape.

The focused Ajay-Damodar Interfluve region of West Bengal has occupying an area of 6173.79 km^2 in the Bhagirathi-Hooghly catchment which somewhat looks like a hammer. This area is bounded by Ajay River on the north, Barakar River and Maithan Dam on the west, girdled by Damodar River on the south and the Bhagirathi-Hooghly River on the east covering.

The river Ajay originates from the Chakai hill tract (86°21'40 E, 24°25'N, at 346.3m above MSL) of the Chotanagpur plateau in the district of Saran, Bihar, enters West Bengal near Chittaranjan (86°42'30 E, 23°55'N, at 233.8m MSL) and drains into the river Bhaghirathi at Katoya (88°08'E, 23°39'N, at 14m MSL) in Bardhaman district. It flows as the common boundary between Bardhaman and Birbhum districts of West Bengal .This riverine route was an important one in ancient rarh Bengal. The southern bank of the basin is the water-shed by the river Kunur, the main tributary of the river Ajay. It originates from the undulating land to the north of Kanksa police station, Bardhaman and drains into the river Ajay at Kogram.

The Damodar River begins near Chulhapani village, Lohardaga district, on the Chotanagpur Plateau in the Jharkhand state in eastern India. The river flows in the direction of east for about 592 km across the states of Jharkhand and West Bengal to the estuary of the river

Hooghly, south kolkata, West Bengal. It has a number of tributaries and sub tributaries, such as Barakar, Konar, Bokaro, Jamnai, Haharo, Guaia, Ghari, Khadia and Bhera.

The Barakar River is the main tributary of the Damodar River in Eastern India. Originating near Padma in Hazaribagh district of Jharkhand it flows for 225 kilometres (140 mi) across the northern part of the Chotanagpur Plateau, mostly in a west to east direction, before joining the Damodar near Dishergarh in Asansol, Bardhaman district of West Bengal. It has a catchment area of 6,159 square kilometres (2,378 sq mi). The main tributaries are Barsoti and Usri, flown in from the south and north respectively. Apart from the two main tributaries some fifteen medium or small streams join it. The Barakar skirts the northern portion of Parasnath Hills, 1,350 metres (4,430 ft) above sea level, the highest hill in the region, located in Giridih district of Jharkhand and a centre of Jain pilgrimage.

The total area of particular Ajay-Damodar region is **27,838.06km^2**. This area mainly starting from the upland of eastern side of the Chotanagpur plateau in the modern state of Jharkhand forms a major interfluvial drainage between Ajay and Damodar River beginning from its watershed area in the upstream which finally merges with Bhagirathi River valley West Bengal.

:-Proposed Area for Research

The area between Ajay and Damodar River is always considering a potential area for archaeology in present West Bengal. But the rest area in between Ajay-Damodar River is situated in Jharkhand and some square km is in Bihar. In this area there are many tributaries of those rivers with a proper basin. The area that falls into Jharkhand has many prehistoric, Rockart, Chalcholithic, Megalithic, Iron Age, Buddhist and Jain temple sites. Some sites are viz. Giridih Jain Digambar Mandir, Canary Hill Hazaribagh District, Benti megaliths Chatra District, Chechgaongadh Dhanbad District, Korambey Lohardaga-Gumla etc. The areas falling into West Bengal have many prehistoric, Chalcholithic, early Historic as well as medieval sites. Some sites are also excavated like Pandurajar Dhibi, Mangalkot, Birbhanpur etc.

Hence certainly this region had the parallel development with the historical event of the subcontinent and the numbers of archaeological sites reported from this interfluvial zone also

advocate about this fact. Therefore the plethora of archaeological data scattered in the region denotes the long and rich cultural heritage of the interfluvial Region. This needs to be suggest further investigated to have a holistic understanding of the evolution and development of settlement system in this interfluvial zone.

PREVIOUS RESEARCH:

Lot of documentation works have been done on Jharkhand zone. R.C. Prasad Singh (1958) in an article mentions some previous work, which is done by different scholars in different time and space. Those works are viz. In the *Indian Antiquary* of 1872 V. Ball wrote an essay on the distribution of megaliths in the district of Singhbhum and also stones that were used for their construction. He referred to another find called "Two stone implements from Parasnath Hill" in the *Proceedings of the Asiatic Society of Bengal* of 1878 and observed that these tools were ordinary types of polished celt and were made of volcanic rock.James Wood Mason wrote a critical essay on the "Prehistoric Antiquities of Ranchi" in the Journal of the Asiatic Society of Bengal in 1888.The same author published another article, "Notice of a Neolithic Celt from Jashpur in the Chotanagpur district" and he also referred to the tool types and stone of which the tools were made.J. Collin Brown published papers on "Notes on a Copper Celt found in the Palamau district" and "Notes on two Copper Axes" in the year 1915. The author described tool types in detail and attempted to assign a tentative date on typological basis. But so long as cultural sequence of Prehistoric sites is not established, it is not wise to assign any particular date. S. C. Roy followed a lead given by V. Ball in 1916 and endeavored to deal with the prehistoric archaeology of Bihar. He wrote his first article on the "Notes on Some Prehistoric Stone tools found in the Ranchi district". He classified these tools and referred to different stones. He attached photographs of his tools but they do not give every detail that is needed by modern archaeologist. Dr. Campwell wrote an article on the "Copper celt from Hazaribagh".

In area around West Bengal, Arun K. Nag (1987) department of Ancient Indian History Culture and Arcahaeology, Visva-Bharati University,Santiniketan West Bengal had done an exploration work in the Ajay–Damodar River valley and documented some prehistoric as well as proto-historic sites. In his work he wanted to know the potentiality of the palaeolithic culture as well as the chacolithic culture in that particular area.

Samir K. Mukherjee, Amita Ray, Anil Chandra Pal, Chitrarekha Gupta, Ashok Datta, Balaram Chatterjee, Netai Chandra Das, and D.K. Chakraborty (IAR-1987-88, pp. 111-114) of the Department of Archaeology, University of Calcutta, resumed excavation at Mangalkot with the objectives to understand the nature of the introduction of iron in the chalcolithic phase, to confirm the culture-sequence of the site achieved through earlier excavations, to understand the relations between wall, and the brick well and to trace out the peripheral extension of the Black-and-red Ware culture in the neighbourhood of Mangalkot.

An exploration conducted by Suchira Roychoudhury (2002), in the Ajay and Kunnur River valley, she found many Proto-historic as well as early historic habitations sites. That result helps her to understand the development of the cultures. This was through passage of time supplemented with excavation to understand man-land relationship.

A joint exploration conducted by R.K. Chattopadhyay, Rajat Sanyal and Sharmila Saha (2006), in the interfluvial area made a preliminary empirical attempt to understand the nature and pattern of spatial distribution of early medieval-medieval archaeological material in the central-southern-south-western part of the Barddhaman district.

Research undertaken by Sharmi Chakraborty (2010) around the Damodar area attempted to understand the possibilities of reconstructing the existence and functioning of network linkages between Chotanagpur and Early Historic sites of Bengal.

Worked by Sharmistha Chatterjee and Sayan Bhattacharya (2016) investigated the early medieval archaeological record of a particular region through intensive study in order to reconstruct the cultural landscape of *'Dakshina Radha'*–constituting chiefly the interfluve areas of Ajay-Damodar and Dwarakeshwar River. It is an attempt to understand the nature and pattern of spatial distribution of the early medieval sites, especially on the basis of empirical evidences gained through extensive explorations in the study area.

LACUNAES:

The previous research has been in many cases descriptive and one fails to understand the holistic view of the settlement pattern. Barring a few works on Mangalkot and a part of Damodar, most of the works have dealt with find spots of sculptures and none descript sites. The notion of site is not understood neither its relation to the landscape of the interfluvial zone is hardly attempted. The following outlines some of the important shortcomings which can be attempted in the present work:

- Limited study to understand the settlement pattern has been attempted which is a very important aspect to understand the 'region'.

- Holistic understanding of a site, such as its origin, development, locational criteria, man land relationship and relation with other sites are not available in previous research in most of the cases.

- Ceramics is one of the most important Artifacts for understanding an archaeological site. Very limited work of ceramics has been done on this region mainly due to the lack of any systematic excavation of the sites. The Chronological sequence of the ceramics yet not been established of this region.

- Most of the archaeological researches in this interfluvial zone have been concentrated to the mid stream of both the rivers. Few work have been attempted to understand the cultural sequence of this Ajay-Damodar Interfluve Region in the upstream as well as downstream of the region.

- So far no attempt has also been taken to study archaeological site in its proper geographical landscape and context which will throw light on the palaeo-landscape as well as the formation and preservation of the material record.

- Previous researches had not attempted to understand the artifacts in context. The wide range of find spots needs to be properly mapped to understand the development of the sites in the landscape. Artifacts like pottery, inscription, sculpture and architectural remains etc.

- Previous researches have not been attempted to understand the cultural development of the zone from the upstream to downstream in a single platform.

AIMS AND OBJECTIVES OF THE STUDY:

The entire objective of this research work is to study, document the nature and characteristics of the archaeological settlement pattern of the Ajay-Damodar Interfluve Region, through the following specific aims and objectives:

- To study the geomorphology of the Ajay-Damodar Interfluve Region in order to understand the nature, formation and distribution of the archaeological record on the present landscape.

- To study the nature of the site and their location pattern, i.e., whether the sites situated on the active flood plain or on the inland.

- To create the co-relation between settlement pattern and natural resources, as this is the most predominant factor for human settlement.

- To understand linkage pattern within the sites. This can be attempted by comparing ceramics and other documented artifactual assemblages of the surface explored sites along with the excavated ones and accessible museums reserved collections.

- To understanding the cultural development from the upstream to downstream in this interfluves horizons.

- An attempt will be made to understand the ceramic and other material of the sites to reconstruct site activities, cultural contact and probable provenance of such archaeological record.

- To understand the catchment area and resource bearing zones and their linkage with these sites.

- Trying to understand the technology and development of the pottery on various time and space.

- To highlight the importance of the area in respect of culture, religion and administrative strategic centers of the cultural periods.

METHODOLOGY OF THE STUDY:

- To make an assessment of the archaeological potentiality of the region, background research will be conducted based on the review and evaluation of the archaeological and historical literature relevant to the proposed area.

- For this research work, field work is an important aspect. Village to village intensive survey of the Ajay-Damodar Interfluve Region will be done with the help of toposheets and GPS technology to accurately plot the site locations. Proper systematic sampling techniques will be employed to have a complete view of this vast area of study.

- To understand the local geography and geomorphology for this study are is very essential. The efforts will be made to understand the present landscape through consultation with geologists working on this terrain and referring to soil reports and geomorphology of Geological Survey of India. Use of remote sensing maps will also be made to check the various changing features in relation to the context of the sites in the present landscape changes.

- One of the major sources for this study should be systematic surface survey to understand the assemblage in its proper context. In that context the researcher needs

to be carrying out the comparative study of the cultural material accessible in different museums and institutes.

- Artifacts provide very important information about the Archaeological site; it needs to be analyzed with a specific methodology and approach. On this ground Artifacts should be classified systematically on technological, format, stylistic and functional grounds as well as the locational analysis.

- To reconstruct the historical importance of the area a comparative study will be done with other areas of contemporary period to highlight the historical importance of the region.

TENTATIVE CHAPTERISATION:

- **INTRODUCTION**
- **ENVIRONMENTAL SETTING**
- **NATURE AND DISTRIBUTION OF THE ARCHAEOLOGICAL SITES**
- **ARTEFACTUAL ASSEMBLAGE**
- **ETHOARCHAEOLOGICAL ANALYSES**
- **SETTLEMENT PATTERN AND SYSTEMS**
- **CONCLUSION**

REFERENCES:

1. Chakrabarti, Dilip K. *Archaeology of Eastern India: Chhotanagpur Plateau and West Bengal*. Munshiram Manoharlal Publishers, New Delhi. 1993.
2. Chakrabarti, Dilip K. *Theoretical Issues in Indian Archaeology*. Munshiram Manoharlal Publishers, New Delhi. 1988.
3. Chakrabarti, Dilip K. *Archaeological Geography of the Ganga Plain: The Lower And The Middle Ganga*. Permanent Black, Delhi. 2001.
4. Chakrabarti, Dilip K. *The Archaeology of Ancient Indian Cities*. Oxford University Press, New Delhi. 1995.
5. Chakraborty, Sharmi. "Resource Base and Consumer Sites -Tracing Early Historic Network in Damodar Valley." *Pratna Samiksha,* New Series Vol. I. 2010. pp. 65-81.
6. Chattopadhyay, R.K., Rajat Sanyal and Sharmila Saha. "An Archaeological Study along the Damodar-Ajay Interfluve in West Bengal (circa AD ninth to fifteenth Centuries)." *Puratattva, Vol.* 36. 2006. pp. 117-31.
7. Chatterjee, Sharmishta and Sayan Bhattacharya. "Early Medieval Archaeology of the Ajay-Damodar-Dwarakeshwar Interfluve Area." *Sanskriti Bichitra,* Vol. I. 2016. pp. 288-97.

8. Imam, Bulu. *Antiquarian Remains of Jharkhand.* The Indian National Trust for Art and Cultural Heritage, New Delhi and Aryan Book International, New Delhi. 2014.

9. Mishra, Anup. *Beyond Pots and Pans a study on Chalcolithic Balathal*. Indra Gandhi Rashtriya Manav Sangrahlaya, Bhopal and Aryan Book International New Delhi. 2008.

10. Nag, Arun K. "Spatial Analysis of Pre- and Proto-Historic Sites in Ajay-Damodar Valley." *Archaeology and History: Essays of Memory of Sri A. Ghosh* (eds. B.M. Pande and B.D. Chottopadhyaya). Delhi. 1987. pp. 265-280.

11. Roy, Amita and Samir Kr. Mukherjee. "Excavation at Mangalkot." *Indian Archaeology 1988-1989—a Review*. New Delhi. 1993. pp. 111-14.

12. Roy, Suvendu and Abhay Sankar Sahu. "Quaternary tectonic control on channel morphology over sedimentary low land: A case study in the Ajay-Damodar Interfluve of Eastern India." *Geoscience Frontiers*. 2015. pp. 927- 46.

13. Roychoudhury, Suchira and Sharmistha Chatterjee. "Ceramics of Mangalkot Excavation 2009-2010: a Preliminary Report." *Pratna Samiksha,* New Series Vol. II. 2011. pp. 91-101.

14. Roychoudhury, Suchira and S.N. Rajaguru. "Excavation at Mangalkot 2009-2010: Preliminary Geological Investigations." *Pratna Samiksha,* New Series Vol. I. 2010. pp. 39-48.

15. Roychoudhury, Suchira. "Understanding Archaeological Settlement in the Dynamic Landscape of the Ajay River Valley." *Archaeology of Eastern India: New Perspective* (eds. Gautam Sengupta and Sheena Panja). Kolkata. 2002. pp. 125-41.

16. Singh, R.C. Prasad. "Prehistoric Bihar in Archaeological Perspective." *The Bihar Research Society,* Vol. XLIV, Parts III & IV. 1958. pp.